Evaluating Recovery Services:

The California Drug and Alcohol Treatment Assessment (CALDATA)

Executive Summary

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State of California
Pete Wilson, Governor

Health and Welfare Agency
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State of California
Department of Alcohol and Drug Programs
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National Opinion Research Center

Lewin-VHI, Inc.

Executive Summary

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August, 1994

Dear Colleagues:

Twenty-two years ago I was administering the drug treatment program in Vietnam. We did not know what worked then. Now we do! The recent California Outcome Study brought the most rigorous science ever applied to our treatment system and documented that treatment and recovery programs are a good investment.

In California, we have assumed that alcohol and other drug abuse treatment works. We have viewed it as an investment and not a cost. Recognizing the significant return on investment, economically, and in terms of social and individual opportunity, we asked the next question: Does treatment work well enough to justify the use of scarce public funds to help pay for it?

Governor Pete Wilson has taken this question very seriously. As Governor, he invested more than $2 million in this landmark study of the effectiveness and benefits of alcohol and other drug abuse treatment. This monograph summarizes the most rigorous, retrospective outcome study ever conducted on drug abuse treatment. This scientific investigation documents the success of treatment and recovery.

In 1992, there were approximately 150,000 persons in treatment in California. A rigorous probability sample of 1900 were included in this study with follow-up covering as much as two years of treatment. This sample was drawn from all four major treatment modalities including therapeutic communities, social model, outpatient drug free and methadone maintenance.

Results indicate three major points. First, treatment is very cost beneficial to taxpayers. The cost benefit averages $7 return for every dollar invested. Second, criminal activities significantly declined after treatment. In 1992, the cost of treating approximately 150,000 individuals was $200 million. The benefits received during treatment and in the first year afterwards totaled approximately $1.5 billion in savings. The largest savings were due to reductions in crime. Finally, significant improvements in health and corresponding reductions in hospitalizations were found during and after treatment. Emergency room admissions, for example, were reduced by one-third following treatment.

The next phase of our research will focus on extending these projections to cover lifetime benefits, and better recognizing cost-beneficial forms of treatment. This California study corroborates a number of smaller studies in the United States which prove that appropriate alcohol and other drug abuse treatment works. Treatment is a good investment!

Sincerely,

ANDREW M. MECCA, Dr.P.H.
Director

EVALUATING RECOVERY SERVICES: THE CALIFORNIA DRUG AND ALCOHOL TREATMENT ASSESSMENT (CALDATA)

Executive Summary

Submitted to

State of California
Department of Alcohol and Drug Programs

by

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PURPOSE

Under the leadership of Governor Pete Wilson, the California Department of Alcohol and Drug Programs (CADP) launched an initiative, in 1992, to determine the epidemiology of substance abuse and the outcomes of substance abuse treatment. The California Drug and Alcohol Treatment Assessment (CALDATA) is the first product of this initiative. CALDATA is a pioneering large-scale study of the effectiveness, benefits, and costs of alcohol and drug treatment in California, using state data bases, provider records, and follow-up interviews with participants in treatment. CALDATA's primary source of information is a voluntary survey of publicly supported participants. CALDATA is the first follow-up interview study to use random sampling techniques with this population.

The purpose of CALDATA was to study:

- the effects of treatment on participant behavior;
- the costs of treatment; and
- the economic value of treatment to society.

The **effects of treatment** are the differences in behavior and experience reported by respondents before and after treatment. The **costs of treatment** were calculated from financial records collected directly from the providers involved in CALDATA. These cost figures have been verified for consistency with other data about these programs and are quite consistent with other study results on treatment costs. The **economic value of treatment** was based largely on the costs avoided due to reductions in the burden of crime and illness, as well as a careful review of shifts in income sources.

The California Department of Alcohol and Drug Programs in partnership with the National Opinion Research Center (NORC) at the University of Chicago and Lewin-VHI, Inc., conducted the study during the period of September, 1992 through March, 1994.

METHODS

Phase One

CALDATA gathered information in two phases. The first phase involved sampling counties, providers, and participants in four types of treatment programs in California. The treatment types include:

- Residential programs
- Residential "social model" programs in particular
- Outpatient programs
- Outpatient methadone

Participants were selected at random from discharge (or in-treatment) lists developed on site at cooperating providers. Sixteen counties, 97 providers, and approximately 3,000 participants who were in treatment or were discharged between October 1, 1991 and

September 30, 1992 were selected into the study sample. The random sample was specifically designed to represent the nearly 150,000 participants in treatment.

The number of programs involved in CALDATA is larger than any prior treatment follow-up study. Further, these programs were systematically selected with known probabilities from a rigorously developed sampling framework, so that those individuals followed up are representative of all participants in treatment in the selected modalities throughout California.

As authorized by federal and state law and permitted by consent obtained routinely on admission to treatment, the program records of participants selected for the follow-up sample were read and abstracted to determine additional important research information and to verify the self-reported data[1]. Using a combination of methods including letters, postcards, telephone calls, visits to last known addresses, contacting relatives or institutional connections, and searching various accessible public records, CALDATA staff sought to locate members of the sample and seek their participation in the study.

In order to protect the privacy of respondents, strict confidentiality was maintained throughout the data collection period. The methods used to protect confidentiality were approved by the California Health and Welfare Protection of Human Subjects Committee.

Phase Two

In the second phase, more than 1,850 individuals drawn from 83 cooperating providers were successfully contacted and interviewed in 9 months. The participant follow-up interview was developed for CALDATA based on extensive work with previous research studies. The questionnaire took approximately one hour and fifteen minutes to administer on average. Follow-up interviews occurred an average of 15 months after treatment, with the longest interval being 24 months. Part of the sample was comprised of individuals who were in continuing methadone maintenance treatment, since this type of treatment is typically longer term than other services.

The results of this study will fill many of the gaps in the research literature--such as the detailed coverage of social model programs and the side-by-side comparison of cost and effectiveness of treatment for alcohol, cocaine, and heroin abuse.

The major goal of the study was to provide CADP a thorough analysis of the data on which data-driven policy decisions can be made. Public policy based on fact ensures the best return on investment for taxpayers.

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[1]Studies of the reliability and validity of responses to surveys by drug abusers show that addicts provide generally truthful and accurate information (Hubbard, R.L., et .al., 1989, *Drug Abuse Treatment: A National Study of Effectiveness*, Chapel Hill: The University of North Carolina Press, p. 31).

KEY FINDINGS

THE COSTS-BENEFITS OF TREATMENT IN CALIFORNIA

Taxpaying Citizens

- ***Costs and benefits to taxpaying citizens***[2]: The cost of treating approximately 150,000 participants represented by the CALDATA study sample in 1992 was $209 million, while the benefits received during treatment and in the first year afterwards were worth approximately $1.5 billion in savings to taxpaying citizens, due mostly to reductions in crime.

- ***Daily trade-off***: Each day of treatment paid for itself (the benefits to taxpaying citizens equaled or exceeded the costs) on the day it was received, primarily through an avoidance of crime.

- ***Cost-benefit ratios for taxpaying citizens***: The benefits of alcohol and other drug treatment outweighed the costs of treatment by ratios from 4:1 to greater than 12:1 depending on the type of treatment.

- ***Differences by treatment types***: The cost-benefit ratio for taxpaying citizens was highest for discharged methadone participants, lowest—but still clearly economically favorable—for participants in residential programs, including social model recovery houses.

Total Society: Economic Benefits

- ***Cost-benefit ratios for the total society***: Findings differed when cost-benefit ratios for the total society were calculated. The cost-benefit ratios ranged from 2:1 to more than 4:1 for all treatment types, except methadone treatment episodes ending in discharge. For methadone episodes ending in discharge, there were net losses—mainly from earnings losses to the treatment participants themselves.

Benefits Projection

- ***Benefits projection***: Benefits after treatment persisted through the second year of follow-up for the limited number of participants followed for as long as two years. This suggests that projected cumulative lifetime benefits of treatment will be substantially higher than the shorter-term figures. An additional phase of follow-up interviews and analyses would permit a more valid projection of lifetime treatment costs and benefits.

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[2]The economic benefits of treatment were calculated two ways: benefits to *taxpaying citizens* and benefits to the *total society*. The major difference is that taxpaying citizens benefit when there is less theft and other crime and when the State makes fewer drug-related disability payments and other welfare-type transfers. However, these transfers of income and property are considered economically neutral to the total society, since one person's loss equals another's gain.

TREATMENT EFFECTIVENESS

- ***Crime***: The level of criminal activity declined by two-thirds from before treatment to after treatment. The greater the length of time spent in treatment, the greater the percent reduction in criminal activity.

- ***Alcohol/Drug Use:*** Declines of approximately two-fifths also occurred in the use of alcohol and other drugs from before treatment to after treatment.

- ***Health Care:*** About one-third reductions in hospitalizations were reported from before treatment to after treatment. There were corresponding significant improvements in other health indicators.

- ***Differences by substance***: There has been concern that stimulants, and crack cocaine especially, might be much more resistant to treatment than more familiar drugs such as alcohol or heroin. However, treatment for problems with the major stimulant drugs (crack cocaine, powdered cocaine, and methamphetamine), which were all in widespread use, was found to be just as effective as treatment for alcohol problems, and somewhat more effective than treatment for heroin problems.

- ***No gender, age, or ethnic differences***: For each type of treatment studied, there were slight or no differences in effectiveness between men and women, younger and older participants, or among African-Americans, Hispanics, and Whites.

- ***Ethnic differences in selecting treatments***: There were ethnic differences in the selection of treatment types and in reported main drugs of use. Hispanics were disproportionately in methadone programs for heroin addiction and African-Americans were disproportionately in residential programs (primarily for alcohol and cocaine) compared with non-Hispanic Whites and with African-Americans in other types of treatment.

- ***Employment and economic situation***: Overall, treatment did not have a positive effect on the economic situation of the participants during the study period. However, the data indicate that longer lengths of stay in treatment have a positive effect on employment. This finding is greater for those in social model or other residential programs than for the other treatment types. The largest gains in employment occur with those individuals staying in treatment beyond the first month.

- ***Disability and Medi-Cal***: In every type of treatment there were greater levels of enrollment and payments received from disability and Medi-Cal after treatment; these increases ranged from one-sixth to one-half. The study analyses indicated that treatment increased the eligibility to receive disability payments and led to overall improvements in health status.

TOTAL SAVINGS AND COSTS OF TREATMENT SYSTEM FOR TAX-PAYING CITIZENS